```
Layer (type)            Output Shape        Param #
====================================================================
input_1 (InputLayer)      (None, 1)            0
_____
lambda_1 (Lambda)        (None, 512)           0
_____
dense_1 (Dense)          (None, 128)         65664
_____
dropout_1 (Dropout)      (None, 128)           0
_____
dense_2 (Dense)           (None, 1)           129
====================================================================
Total params: 65,793
Trainable params: 65,793
Non-trainable params: 0
_____
Train on 90000 samples, validate on 15000 samples
Epoch 1/20
90000/90000 [==============================] - 164s 2ms/step - loss: 0.3547 - acc: 0.8443 - val_loss: 0.3393 - val_acc: 0.8507
Epoch 2/20
90000/90000 [==============================] - 160s 2ms/step - loss: 0.3236 - acc: 0.8599 - val_loss: 0.3188 - val_acc: 0.8607
Epoch 3/20
90000/90000 [==============================] - 161s 2ms/step - loss: 0.3137 - acc: 0.8651 - val_loss: 0.3092 - val_acc: 0.8657
Epoch 4/20
90000/90000 [==============================] - 161s 2ms/step - loss: 0.3054 - acc: 0.8682 - val_loss: 0.3128 - val_acc: 0.8654
Epoch 5/20
90000/90000 [==============================] - 160s 2ms/step - loss: 0.2987 - acc: 0.8718 - val_loss: 0.3000 - val_acc: 0.8718
Epoch 6/20
90000/90000 [==============================] - 157s 2ms/step - loss: 0.2932 - acc: 0.8755 - val_loss: 0.2968 - val_acc: 0.8746
Epoch 7/20
90000/90000 [==============================] - 157s 2ms/step - loss: 0.2873 - acc: 0.8767 - val_loss: 0.2957 - val_acc: 0.8754
Epoch 8/20
90000/90000 [==============================] - 161s 2ms/step - loss: 0.2823 - acc: 0.8809 - val_loss: 0.2903 - val_acc: 0.8768
Epoch 9/20
90000/90000 [==============================] - 158s 2ms/step - loss: 0.2776 - acc: 0.8820 - val_loss: 0.2855 - val_acc: 0.8780
Epoch 10/20
90000/90000 [==============================] - 161s 2ms/step - loss: 0.2717 - acc: 0.8851 - val_loss: 0.2860 - val_acc: 0.8799
Epoch 11/20
90000/90000 [==============================] - 159s 2ms/step - loss: 0.2671 - acc: 0.8874 - val_loss: 0.2799 - val_acc: 0.8811
Epoch 12/20
90000/90000 [==============================] - 160s 2ms/step - loss: 0.2635 - acc: 0.8898 - val_loss: 0.2767 - val_acc: 0.8839
Epoch 13/20
90000/90000 [==============================] - 158s 2ms/step - loss: 0.2591 - acc: 0.8927 - val_loss: 0.2757 - val_acc: 0.8849
Epoch 14/20
90000/90000 [==============================] - 160s 2ms/step - loss: 0.2561 - acc: 0.8931 - val_loss: 0.2710 - val_acc: 0.8882
Epoch 15/20
90000/90000 [==============================] - 158s 2ms/step - loss: 0.2514 - acc: 0.8961 - val_loss: 0.2706 - val_acc: 0.8872
Epoch 16/20
90000/90000 [==============================] - 160s 2ms/step - loss: 0.2463 - acc: 0.8982 - val_loss: 0.2689 - val_acc: 0.8880
Epoch 17/20
90000/90000 [==============================] - 166s 2ms/step - loss: 0.2435 - acc: 0.8990 - val_loss: 0.2649 - val_acc: 0.8904
Epoch 18/20
90000/90000 [==============================] - 158s 2ms/step - loss: 0.2390 - acc: 0.9022 - val_loss: 0.2692 - val_acc: 0.8902
Epoch 19/20
90000/90000 [==============================] - 159s 2ms/step - loss: 0.2349 - acc: 0.9039 - val_loss: 0.2596 - val_acc: 0.8919
Epoch 20/20
90000/90000 [==============================] - 153s 2ms/step - loss: 0.2330 - acc: 0.9048 - val_loss: 0.2612 - val_acc: 0.8921
45000/45000 [==============================] - 65s 1ms/step

Test score: 0.2590669931623671
Test accuracy: 0.8928
```

model accuracy & loss